



Science For A Better Life



### MUCK CROPS RESEARCH STATION IPM 2017

#### Forecasting / weather information as of September 22, 2017

| MODELS   | CUM DEGREE DAYS | THRESHOLDS                    |                                | COMMENTS: |
|--|-----------------|-------------------------------|--------------------------------|-----------|
|  |                 | ONE                           | TWO                            |           |
| Standard Growing Degree Day Model (Start April 1, 2017): |                 |                               |                                |           |
| <b>GROWING DEGREE DAYS</b><br>(DD base 5)                | <b>1897</b>     | not applicable                | not applicable                 |           |
| Insect Degree Day Models:                                |                 |                               |                                |           |
| <b>CARROT RUST FLY</b><br>(DD base 3)                    | <b>2239</b>     | 329-395 DD                    | 1399-1711 DD                   |           |
| <b>ONION MAGGOT</b><br>(DD base 4)                       | <b>2068</b>     | 210 DD<br>1 <sup>st</sup> Gen | 1025 DD<br>2 <sup>nd</sup> Gen |           |
| <b>CARROT WEEVIL</b><br>(DD base 7)                      | <b>1568</b>     | 138-156 DD<br>Oviposition     | 455 DD 90%<br>oviposition      |           |
| <b>ASTER LEAFHOPPER</b><br>(DD base 9)                   | <b>1262</b>     | 128 DD                        | 390 DD<br>adult emerge         |           |
| <b>TARNISHED PLANT BUG</b><br>(DD base 12)               | <b>848</b>      | 40 DD                         |                                |           |
| <b>CABBAGE MAGGOT</b><br>(DD base 6)                     | <b>1729</b>     | 314 DD<br>1 <sup>st</sup> Gen | 847 DD<br>2 <sup>nd</sup> Gen  |           |
| <b>SEEDCORN MAGGOT</b><br>(DD base 4)                    | <b>2068</b>     | 200 DD<br>1 <sup>st</sup> Gen | 600 DD<br>2 <sup>nd</sup> Gen  |           |

#### Disease Forecasting

**BOTCAST** – Cumulative disease severity index (CDSI) for botrytis currently at 114, risk is moderate although onions are closed to finished.

**DOWNCAST** – Sporulation has slowed, but still can be occurring every couple days. We have also had three infection periods in the past week. Risk is moderate.

**BREMCAS**T – There has been two sporulation infection periods (SIP) for downy mildew on lettuce in the past week meaning risk is low to moderate.

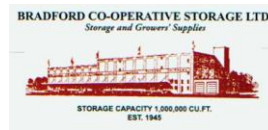
**TOMCAST** – CDSI of 131.

#### Soil Temperatures:

Sept 21: 5 cm – 21.5  
10 cm – 21.1  
20 cm – 20.7

| DATE (Sept, 2017) | TEMPERATURE (°C) |      | ACCUMULATED RAINFALL (mm) |
|-------------------|------------------|------|---------------------------|
|                   | MAX              | MIN  |                           |
| 12                | 23.8             | 3.4  | 0.0                       |
| 13                | 27.4             | 4.2  | 0.0                       |
| 14                | 26.7             | 6.1  | 0.0                       |
| 15                | 28.3             | 11.7 | 0.0                       |





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|    |      |      |     |
|----|------|------|-----|
| 16 | 27.1 | 13.2 | 0.0 |
| 17 | 28.9 | 11.4 | 0.0 |
| 18 | 28.9 | 10.6 | 0.0 |
| 19 | 29.1 | 12.9 | 0.2 |
| 20 | 27.0 | 18.5 | 0.2 |
| 21 | 27.5 | 15.1 | 0.0 |

